ABSTRACT OF THE DISCLOSURE

An apparatus includes a camera (201) for sensing a first direction, a camera (202) for sensing a second direction, a mirror (221) for controlling the view of the camera (201) to a first view, and a mirror (222) for controlling the view of the camera (202) to a second view. The mirrors (221, 222) do not share ridge lines with each other, and the lens center of a virtual camera having the first view approximately matches that of a virtual camera having the second view.